# **Glossary**

#### **Broadcast burn**

The controlled application of fire to wildland fuels in their natural or modified state over a predetermined area often conducted to reduce wildland fire fuel loads, restore the ecological health of an area, or to clear vegetation.

### **CalWat**

The California Interagency Watershed Map of 1999 (Calwater 2.2, updated May 2004, "calw221") is the State of California's working definition of watershed boundaries. Previous Calwater versions (1.2 and 2.2) described California watersheds, beginning with the division of the State's 101 million acres into ten Hydrologic Regions (HR). Each HR is progressively subdivided into six smaller, nested levels: the Hydrologic Unit (HU, major rivers), Hydrologic Area (HA, major tributaries), Hydrologic Sub-Area (HSA), Super Planning Watershed (SPWS), and Planning Watershed (PWS). At the Planning Watershed (the most detailed level), where implemented, polygons range in size from approximately 3,000 to 10,000 acres. At all levels, a total of 7035 polygons represent the State's watersheds. The present version, Calwater 2.2.1, refines the watershed coding structure and documentation (database fields were added and some were renamed). There are significant watershed boundary, code, and name differences between Calwater versions 1.2 (1995), 2.0 (1998), and 2.2 (1999). The differences between versions 2.2 (1999) and 2.2.1 (2004) are attribute field names and some inserted lines that identify differences between State and federal watersheds.

# Chaining

Consists of pulling heavy chains in a "U" or "J" shaped pattern behind two crawler-type tractors, or by one tractor pulling a chain with a heavy ball attached to the end. Chaining is most effective for crushing brittle shrubs, such as manzanita and chamise, and uprooting woody plants. Chaining can be done on irregular, moderately rocky terrain, with slopes of up to 50%. Although chaining may cause soil disturbance, the resultant plant debris can be left in place to minimize surface erosion, shade the ground surface, maintain soil moisture and provide nutrient recycling. Alternatively, the debris can be burned to facilitate grass seeding, improve aesthetic values, and eliminate potential rodent habitat. Chaining can be a cost effective means to incorporate grass seed into soil,

especially in burned areas, as it provides a variety of seeding depths and microsites, which can improve ground cover and forage production.

## Chipping

Chippers or "tub-grinders" are often used to chip the tops and limbs to generate mulch or biomass, which can be used onsite, sold to homeowners or garden supply stores, or used in power generation facilities.

### Class I and II watercourses

California Forest Practice Rules define a Class I watercourse at 916.5 as 1) domestic supplies including springs on site and/or within 100 downstream of operations or 2) a stream where fish are always or seasonally present including habitat to sustain fish migration and passage. The definition of a Class II watercourse is a stream where fish are always or seasonally present within 1000' downstream, and where there is aquatic habitat for nonfish aquatic species.

# **Community Noise Equivalent Level (CNEL)**

A 24-hour average  $L_{eq}$  with no penalty added to noise during the day time hours between 7am and 7pm, a penalty of 5 dB added to evening noise occurring between 7pm and 10pm, and a penalty of 10 dB added to nighttime noise occurring between 10pm and 7am.

#### **Contract Counties**

CAL FIRE provides funding to six counties for fire protection services including wages of suppression crews, lookouts, maintenance of fire fighting facilities, fire prevention assistants, pre-fire management positions, dispatch, special repairs, and administrative services. Contract Counties are responsible for providing initial response to fires on SRA.

#### dBA

An "A-weighted" decibel (dBA) is a decibel corrected for the variation in frequency response of the typical human ear at commonly encountered noise levels.

# DFG 1600 permit

A permit issued by the California Department of Fish and Wildlife that, depending on permit conditions, allows a person, business, state or local government agency, or public utility to substantially modify a river, stream or lake by an activity that will, 1) divert or obstruct the natural flow of any river, stream or lake, 2) substantially change or use any material from the bed, channel, or bank of,

any river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

#### DPA

Federal DPA are lands that would normally receive fire protections services from CAL FIRE; however, due to efficiency of operations these lands receive fire protection from federal agencies according to written agreements with CAL FIRE.

### **Drainage facilities**

Items constructed to control water, including, but not limited to, fords, inside ditches, waterbreaks, outsloping and rolling dips.

# **Drill Seeding/Drilling**

Is often done in conjunction with tilling. The seed drills, which consist of a series of furrow openers, seed metering devices, seed hoppers, and seed covering devices, are either towed by or mounted on a tractor. The seed drill opens a furrow in the seedbed, deposits a measured amount of seed into the furrow, and closes the furrow to cover the seed. Seed may also be injected into the soil directly through direct "drilling" without creating furrows.

## **Ecological Restoration**

Re-establishing the composition, structure, pattern, and ecological processes necessary to facilitate terrestrial and aquatic ecosystem sustainability, resilience, and health under current and future conditions.

#### Feller-buncher

Are often used within a commercial or precommercial thinning or partial cutting for fuel hazard reduction projects such as shaded fuel breaks and wildlife habitat improvement. Feller-bunchers and harvester-forwarder-processors are usually used on slopes of less than 35%, and for handling trees that are between 4-22 inches in diameter. Feller-bunchers clamp the trunks of trees, cut them at the base, pick them up, and bundle them into piles or load them onto trucks.

### **Fuel Break**

An area in which flammable vegetation has been modified to create a defensible space in an attempt to reduce fire spread to structures and/or natural resources, and to provide a safer location to fight fire. These treatments can be a part of a series of fuel modifications strategically located along a landscape.

#### Fire Safe Councils

A group of concerned citizens organized to educate groups on fire safe programs, projects and planning. The Councils work closely with the local fire agencies to develop and implement priorities.

#### **Fuel ladders**

The live or dead vegetation that allows a fire to climb up from the forest floor into the tree canopy.

## **Grubbing/Ripping**

This is usually done with a crawler-type tractor and a brush or root rake attachment. The rake attachment consists of a standard dozer blade adapted with a row of curved teeth projecting forward at the base of the blade. Shrubs are uprooted and roots are combed from the soil by placing the base of the blade below the soil surface.

#### Herbicide

Chemical applications designed to inhibit growth of vegetation.

# Integrated pest management

CA Healthy Schools Act of 2000 (AB2260) defines IMP as a pest management strategy that focuses on long-term prevention or suppression of pest problems through a combination of techniques such as monitoring for pest presence and establishing treatment threshold levels, using non-chemical practices to make the habitat less conducive to pest development, improving sanitation, and employing mechanical and physical controls. Pesticides that pose the least possible hazard and are effective in a manner that minimizes risks to people, property, and the environment, are used only after careful monitoring indicates they are needed according to pre-established guidelines and treatment thresholds.

# **Jackpot burning**

This is tool used to reduce areas of heavy concentrations of surface fuels. This technique involves igniting the concentrations of fuel and limiting the fire to those areas only. Burning of slash piles created by either tractors or by hand is a common method for treating vegetation where there are constraints that limit other types of burning.

# $L_{eq}$

The energy-equivalent noise level (Leq), is the average acoustic energy content of noise, measured during a specific time period.

#### Ldn

The day-night average noise level (Ldn), is a 24-hour average Leq with a 10 dBA penalty added to noise occurring during the hours of 10pm and 7am to account for the greater nocturnal noise sensitivity of people.

#### Litter

The uppermost layer of the forest floor consisting chiefly of fallen leaves and other decaying organic matter.

## **Manual Activity**

Use of hand tools and hand-operated power tools to cut, clear, or prune herbaceous and woody species.

#### **Mastication**

Equipment installed on small wheeled tractors, wheeled or crawler-type tractors, excavators, or other specialized vehicles, is used to cut shrubs and trees into small pieces that are scattered across the ground, where they act as mulch

## **Mechanical Activity**

Use of motorized equipment designed to cut, uproot, crush/compact, or chop existing vegetation.

### Mowing

Tools, such as rotary mowers on wheeled tractors or other equipment, or straight-edged cutter bar mowers, can be used to cut herbaceous and woody vegetation above the ground.

# **Periphyton**

An assemblage of organisms (mostly algae) attached to and living on submerged solid surfaces in natural environments such as rivers.

#### **Prescribe Fire**

Application of fire to fuels to accomplish planned resource management objectives under specified conditions of fuels, weather, and other variables.

### **Prescribed Herbivory**

Intentional use of domestic livestock to reduce a targeted plant population to an acceptable level and/or reducing the vegetative competition of a desired plant species.

### Riparian

The banks and other adjacent terrestrial environs of lakes, watercourses, estuaries, and wet areas, where transported surface and subsurface freshwaters provide soil moisture to support mesic vegetation.

### Sensitive receptors

People that have an increased sensitivity to an environmental impact such as noise, air pollution, hazardous materials etc. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s).

# **Tilling**

Involves the use of angled disks (disk tilling) or pointed metal-toothed implements (chisel plowing) to uproot, chop, and mulch vegetation.

### Underburn

This is a variation of the broadcast burn and is focused on treating surface or ladder fuels in a shaded fuel break setting, to manage understory vegetation for various objectives such as wildlife habitat improvement or for production of cultural plants important to Native Americans.

#### **Unit Fire Plan**

Plans developed by individual CAL FIRE Units to address wildfire protection areas, initial attack success, assets and infrastructure at risk, pre-fire management strategies, and accountability within their geographical boundaries.

# **Water Quality Requirements**

A water quality objective (narrative or numeric), prohibition, TMDL implementation plan, policy, or other requirement contained in a water quality control plan adopted by the Regional Board and approved by the State Water Board.

### Wet areas

Wet Meadows and Other Wet Areas-Those natural areas except cutover timberland which are moist on the surface throughout most of the year and support aquatic vegetation, grasses and forbs as their principal vegetative cover

#### Wetlands

An aquatic (water dominated) land cover class having greater than two percent vegetation cover and having less than 10 percent of the over story canopy occupied by trees or shrubs.

### Wildland Urban Interface (WUI)

The geographical overlap of two diverse systems where the buildings and vegetation are sufficiently close that a wildland fire could spread to a structure or a structure fire could ignite wildland vegetation.

### **WUI treatments**

Hazardous fuel reduction projects in the Wildland Urban Interface (WUI) designed to alter the vertical and horizontal continuity of vegetative fuels to reduce the likelihood of fire ignition, and reducing the rate of spread, duration and intensity of a wildfire.